

FAO World Reference Laboratory for Foot-and-Mouth Disease (WRLFMD)

Genotyping Report

Report Date for this Batch: 24 February 2016

FMDV type O

Country: Thailand

Period: 2015

No. of samples: 14

BATCH: WRLFMD/2015/00032



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FAO World Reference Laboratory for FMD Genotyping Report

IAH-P-EP-MEG-FOR-005-3

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Serotype: O WRLFMD Ref No: TAI/9/2015 Batch No: WRLFMD/2015/00032 Sender Ref: 27/15R3B1 Location: Chamra, Potharam, Ratchaburi, Thailand Date collected: 27/02/2015 Date received by WRLFMD: 26/11/2015 Date received for sequencing: 11/02/2016 Species: Cattle Material used: BTY1 30/01/2016 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 24/02/2016 Reported by: N.J. Knowles Checked by: K. Bachanek-Bankowska Topotype: SEA Genotype/strain: Mya-98 Sequence filename: TAI15-09.SEQ Date sequence last updated: 13/02/2016 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 4220 Min. no. of nt for comparison: 600 Total turn-around time: 90 days Sequencing time: 13 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/TAI/10/2015	TAI15-10	639	636	0	99.53	0.47	SEA	Mya-98
2	O/MAY/2/2014	MAY14-02	639	635	0	99.37	0.63	SEA	Mya-98
3	O/TAI/10/2014	TAI14-10	639	635	0	99.37	0.63	SEA	Mya-98
4	O/TAI/8/2015	TAI15-08	639	635	0	99.37	0.63	SEA	Mya-98
5	O/VIT/18/2014	VIT14-18	639	635	0	99.37	0.63	SEA	Mya-98
6	O/VIT/21/2014	VIT14-21	639	635	0	99.37	0.63	SEA	Mya-98
7	O/VIT/26/2014	VIT14-26	639	635	0	99.37	0.63	SEA	Mya-98
8	O/VIT/27/2014	VIT14-27	639	635	0	99.37	0.63	SEA	Mya-98
9	O/TAI/17/2015	TAI15-17	639	634	0	99.22	0.78	SEA	Mya-98
10	O/VIT/13/2014	VIT14-13	639	634	0	99.22	0.78	SEA	Mya-98
Most Closely Related Reference Viruses									
(see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/MYA/7/98 (DQ164925)	MYA98-07	639	592	0	92.64	7.36	SEA	Mya-98
2	O/TAI/189/87* (TRRL)	TAI87-AC	639	571	0	89.36	10.64	SEA	unnamed
3	O/IND/R2/75* (AF204276)	IND75--A	639	558	0	87.32	12.68	ME-SA	unnamed
4	O/CAM/3/98 (AJ294910)	CAM98-03	639	555	0	86.85	13.15	SEA	Cam-94
5	O1/Manisa/TUR/69 (AY593823)	TUR69--G	639	551	0	86.23	13.77	ME-SA	unnamed
6	O/UAE/4/2008 (KM921876)	UAE08-04	636	547	0	86.01	13.99	ME-SA	Ind-2001c
7	O/IRN/31/2009	IRN09-31	639	548	0	85.76	14.24	ME-SA	PanAsia-2 ^{FAR-09}
8	O/TUR/264/2009* (FMDI)	TUR09-AK	639	548	0	85.76	14.24	ME-SA	PanAsia-2 ^{SAN-09}
9	O/UKG/35/2001 (AJ539141)	UKG01-35	639	547	0	85.60	14.40	ME-SA	PanAsia
10	O/IND/53/79 (AF292107)	IND79A53	639	546	0	85.45	14.55	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

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Serotype: O WRLFMD Ref No: TAI/10/2015 Batch No: WRLFMD/2015/00032 Sender Ref: 29/15R3B2 Location: Huoydoan, Dontum, Nakhonpratom, Thailand Date collected: 03/03/2015 Date received by WRLFMD: 26/11/2015 Date received for sequencing: 11/02/2016 Species: Pig Material used: RS1 31/01/2016 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 24/02/2016 Reported by: N.J. Knowles Checked by: K. Bachanek-Bankowska Topotype: SEA Genotype/strain: Mya-98 Sequence filename: TAI15-10.SEQ Date sequence last updated: 13/02/2016 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 4220 Min. no. of nt for comparison: 600 Total turn-around time: 90 days Sequencing time: 13 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/TAI/9/2015	TAI15-09	639	636	0	99.53	0.47	SEA	Mya-98
2	O/MAY/2/2014	MAY14-02	639	632	0	98.90	1.10	SEA	Mya-98
3	O/TAI/10/2014	TAI14-10	639	632	0	98.90	1.10	SEA	Mya-98
4	O/TAI/8/2015	TAI15-08	639	632	0	98.90	1.10	SEA	Mya-98
5	O/VIT/18/2014	VIT14-18	639	632	0	98.90	1.10	SEA	Mya-98
6	O/VIT/21/2014	VIT14-21	639	632	0	98.90	1.10	SEA	Mya-98
7	O/VIT/26/2014	VIT14-26	639	632	0	98.90	1.10	SEA	Mya-98
8	O/VIT/27/2014	VIT14-27	639	632	0	98.90	1.10	SEA	Mya-98
9	O/TAI/17/2015	TAI15-17	639	631	0	98.75	1.25	SEA	Mya-98
10	O/VIT/13/2014	VIT14-13	639	631	0	98.75	1.25	SEA	Mya-98
Most Closely Related Reference Viruses									
(see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/MYA/7/98 (DQ164925)	MYA98-07	639	589	0	92.18	7.82	SEA	Mya-98
2	O/TAI/189/87* (TRRL)	TAI87-AC	639	569	0	89.05	10.95	SEA	unnamed
3	O/IND/R2/75* (AF204276)	IND75--A	639	556	0	87.01	12.99	ME-SA	unnamed
4	O/CAM/3/98 (AJ294910)	CAM98-03	639	553	0	86.54	13.46	SEA	Cam-94
5	O1/Manisa/TUR/69 (AY593823)	TUR69--G	639	549	0	85.92	14.08	ME-SA	unnamed
6	O/UAE/4/2008 (KM921876)	UAE08-04	636	545	0	85.69	14.31	ME-SA	Ind-2001c
7	O/IRN/31/2009	IRN09-31	639	546	0	85.45	14.55	ME-SA	PanAsia-2 ^{FAR-09}
8	O/TUR/264/2009* (FMDI)	TUR09-AK	639	546	0	85.45	14.55	ME-SA	PanAsia-2 ^{SAN-09}
9	O/UKG/35/2001 (AJ539141)	UKG01-35	639	545	0	85.29	14.71	ME-SA	PanAsia
10	O/IND/53/79 (AF292107)	IND79A53	639	544	0	85.13	14.87	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

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Serotype: O WRLFMD Ref No: TAI/11/2015 Batch No: WRLFMD/2015/00032 Sender Ref: 32/15R3B1 Location: Payayen, Pakchong, Nakhonratchasima, Thailand Date collected: 17/03/2015 Date received by WRLFMD: 26/11/2015 Date received for sequencing: 11/02/2016 Species: Cattle Material used: BTY1 30/01/2016 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 24/02/2016 Reported by: N.J. Knowles Checked by: K. Bachanek-Bankowska Topotype: SEA Genotype/strain: Mya-98 Sequence filename: TAI15-11.SEQ Date sequence last updated: 13/02/2016 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 4220 Min. no. of nt for comparison: 600 Total turn-around time: 90 days Sequencing time: 13 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/TAI/6/2015	TAI15-06	639	638	0	99.84	0.16	SEA	Mya-98
2	O/MAY/2/2014	MAY14-02	639	632	0	98.90	1.10	SEA	Mya-98
3	O/TAI/10/2014	TAI14-10	639	632	0	98.90	1.10	SEA	Mya-98
4	O/VIT/18/2014	VIT14-18	639	632	0	98.90	1.10	SEA	Mya-98
5	O/VIT/21/2014	VIT14-21	639	632	0	98.90	1.10	SEA	Mya-98
6	O/VIT/26/2014	VIT14-26	639	632	0	98.90	1.10	SEA	Mya-98
7	O/VIT/27/2014	VIT14-27	639	632	0	98.90	1.10	SEA	Mya-98
8	O/VIT/13/2014	VIT14-13	639	631	0	98.75	1.25	SEA	Mya-98
9	O/MAY/9/2014	MAY14-09	639	630	0	98.59	1.41	SEA	Mya-98
10	O/TAI/13/2014	TAI14-13	639	630	0	98.59	1.41	SEA	Mya-98
Most Closely Related Reference Viruses									
(see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/MYA/7/98 (DQ164925)	MYA98-07	639	585	0	91.55	8.45	SEA	Mya-98
2	O/TAI/189/87* (TRRL)	TAI87-AC	639	567	0	88.73	11.27	SEA	unnamed
3	O/IND/R2/75* (AF204276)	IND75--A	639	553	0	86.54	13.46	ME-SA	unnamed
4	O/CAM/3/98 (AJ294910)	CAM98-03	639	550	0	86.07	13.93	SEA	Cam-94
5	O1/Manisa/TUR/69 (AY593823)	TUR69--G	639	547	0	85.60	14.40	ME-SA	unnamed
6	O/UAE/4/2008 (KM921876)	UAE08-04	636	542	0	85.22	14.78	ME-SA	Ind-2001c
7	O/IRN/31/2009	IRN09-31	639	544	0	85.13	14.87	ME-SA	PanAsia-2 ^{FAR-09}
8	O/TUR/264/2009* (FMDI)	TUR09-AK	639	544	0	85.13	14.87	ME-SA	PanAsia-2 ^{SAN-09}
9	O/UKG/35/2001 (AJ539141)	UKG01-35	639	543	0	84.98	15.02	ME-SA	PanAsia
10	O/IND/53/79 (AF292107)	IND79A53	639	541	0	84.66	15.34	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

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Serotype: O WRLFMD Ref No: TAI/16/2015 Batch No: WRLFMD/2015/00032 Sender Ref: 52-2/15R3B2 Location: Lumpayaklang, Mouklek, Saraburi, Thailand Date collected: 20/05/2015 Date received by WRLFMD: 26/11/2015 Date received for sequencing: 19/02/2016 Species: Cattle Material used: BTy1 09/02/2016 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 24/02/2016 Reported by: N.J. Knowles Checked by: K. Bachanek-Bankowska Topotype: ME-SA Genotype/strain: PanAsia Sequence filename: TAI15-16.SEQ Date sequence last updated: 24/02/2016 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 4220 Min. no. of nt for comparison: 600 Total turn-around time: 90 days Sequencing time: 5 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/CAM/1/2015	CAM15-01	639	639	0	100.00	0.00	ME-SA	PanAsia
2	O/CAM/3/2015	CAM15-03	639	639	0	100.00	0.00	ME-SA	PanAsia
3	O/CAM/1/2010	CAM10-01	639	612	0	95.77	4.23	ME-SA	PanAsia
4	O/CAM/3/2010	CAM10-03	639	612	0	95.77	4.23	ME-SA	PanAsia
5	O/CAM/6/2010	CAM10-06	639	612	0	95.77	4.23	ME-SA	PanAsia
6	O/VIT/20/2010	VIT10-20	639	612	0	95.77	4.23	ME-SA	PanAsia
7	O/VIT/21/2010	VIT10-21	639	612	0	95.77	4.23	ME-SA	PanAsia
8	O/VIT/23/2010	VIT10-23	639	612	0	95.77	4.23	ME-SA	PanAsia
9	O/VIT/23/2011	VIT11-23	639	612	0	95.77	4.23	ME-SA	PanAsia
10	O/VIT/7/2010	VIT10-07	639	612	0	95.77	4.23	ME-SA	PanAsia
Most Closely Related Reference Viruses									
(see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/UKG/35/2001 (AJ539141)	UKG01-35	639	581	0	90.92	9.08	ME-SA	PanAsia
2	O/KUW/3/97 (DQ164904)	KUW97-03	639	574	0	89.83	10.17	ME-SA	Ind-2001a
3	O/IRN/8/2005	IRN05-08	639	571	0	89.36	10.64	ME-SA	PanAsia-2
4	O/IRN/31/2009	IRN09-31	639	567	0	88.73	11.27	ME-SA	PanAsia-2 ^{FAR-09}
5	O/OMN/7/2001 (DQ164941)	OMN01-07	639	567	0	88.73	11.27	ME-SA	Ind-2001b
6	O/IRN/18/2010	IRN10-18	639	562	0	87.95	12.05	ME-SA	PanAsia-2 ^{BAL-09}
7	O/IRN/88/2009	IRN09-88	639	561	0	87.79	12.21	ME-SA	PanAsia-2 ^{ANT-10}
8	O/BHU/3/2009 (KM921814)	BHU09-03	639	560	0	87.64	12.36	ME-SA	Ind-2001d
9	O/PAK/16/2010	PAK10-16	639	560	0	87.64	12.36	ME-SA	PanAsia-2 ^{PUN-10}
10	O/TUR/257/2008* (FMDI)	TUR08-AD	639	558	0	87.32	12.68	ME-SA	PanAsia-2 ^{TER-08}

nt, nucleotides

* , not a WRLFMD reference number

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Serotype: O WRLFMD Ref No: TAI/17/2015 Batch No: WRLFMD/2015/00032 Sender Ref: 57-2/15R3B3 Location: Nongnumsai, Siquw, Nakhonratchasima, Thailand Date collected: 04/06/2015 Date received by WRLFMD: 26/11/2015 Date received for sequencing: 19/02/2016 Species: Cattle Material used: BTy1 09/02/2016 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 24/02/2016 Reported by: N.J. Knowles Checked by: K. Bachanek-Bankowska Topotype: SEA Genotype/strain: Mya-98 Sequence filename: TAI15-17.SEQ Date sequence last updated: 24/02/2016 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 4220 Min. no. of nt for comparison: 600 Total turn-around time: 90 days Sequencing time: 5 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/TAI/9/2015	TAI15-09	639	634	0	99.22	0.78	SEA	Mya-98
2	O/MAY/2/2014	MAY14-02	639	632	0	98.90	1.10	SEA	Mya-98
3	O/TAI/10/2014	TAI14-10	639	632	0	98.90	1.10	SEA	Mya-98
4	O/TAI/13/2014	TAI14-13	639	632	0	98.90	1.10	SEA	Mya-98
5	O/TAI/8/2015	TAI15-08	639	632	0	98.90	1.10	SEA	Mya-98
6	O/VIT/18/2014	VIT14-18	639	632	0	98.90	1.10	SEA	Mya-98
7	O/VIT/21/2014	VIT14-21	639	632	0	98.90	1.10	SEA	Mya-98
8	O/VIT/26/2014	VIT14-26	639	632	0	98.90	1.10	SEA	Mya-98
9	O/VIT/27/2014	VIT14-27	639	632	0	98.90	1.10	SEA	Mya-98
10	O/TAI/10/2015	TAI15-10	639	631	0	98.75	1.25	SEA	Mya-98
Most Closely Related Reference Viruses									
(see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/MYA/7/98 (DQ164925)	MYA98-07	639	591	0	92.49	7.51	SEA	Mya-98
2	O/TAI/189/87* (TRRL)	TAI87-AC	639	571	0	89.36	10.64	SEA	unnamed
3	O/IND/R2/75* (AF204276)	IND75--A	639	554	0	86.70	13.30	ME-SA	unnamed
4	O1/Manisa/TUR/69 (AY593823)	TUR69--G	639	551	0	86.23	13.77	ME-SA	unnamed
5	O/CAM/3/98 (AJ294910)	CAM98-03	639	550	0	86.07	13.93	SEA	Cam-94
6	O/IRN/31/2009	IRN09-31	639	546	0	85.45	14.55	ME-SA	PanAsia-2 ^{FAR-09}
7	O/TUR/264/2009* (FMDI)	TUR09-AK	639	546	0	85.45	14.55	ME-SA	PanAsia-2 ^{SAN-09}
8	O/UAE/4/2008 (KM921876)	UAE08-04	636	543	0	85.38	14.62	ME-SA	Ind-2001c
9	O/UKG/35/2001 (AJ539141)	UKG01-35	639	545	0	85.29	14.71	ME-SA	PanAsia
10	O/IND/53/79 (AF292107)	IND79A53	639	544	0	85.13	14.87	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

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Serotype: O	Report date: 24/02/2016
WRLFMD Ref No: TAI/18/2015	Reported by: N.J. Knowles
Batch No: WRLFMD/2015/00032	Checked by: K. Bachanek-Bankowska
Sender Ref: 68-1/15R3B3	
Location: Banlao, Mayjai, Payao, Thailand	Topotype: SEA
Date collected: 28/07/2015	Genotype/strain: Mya-98
Date received by WRLFMD: 26/11/2015	Sequence filename: TAI15-18.SEQ
Date received for sequencing: 19/02/2016	Date sequence last updated: 24/02/2016
Species: Water Buffalo	No. of Nt determined: 639
Material used: BTy1 09/02/2016	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 4220
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 90 days
	Sequencing time: 5 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/TAI/20/2015	TAI15-20	639	639	0	100.00	0.00	SEA	Mya-98
2	O/TAI/10/2013	TAI13-10	639	626	0	97.97	2.03	SEA	Mya-98
3	O/MAY/22/2013	MAY13-22	639	624	0	97.65	2.35	SEA	Mya-98
4	O/TAI/11/2013	TAI13-11	639	624	0	97.65	2.35	SEA	Mya-98
5	O/TAI/2/2010	TAI10-02	639	614	0	96.09	3.91	SEA	Mya-98
6	O/TAI/27/2009	TAI09-27	639	614	0	96.09	3.91	SEA	Mya-98
7	O/TAI/5/2010	TAI10-05	639	614	0	96.09	3.91	SEA	Mya-98
8	O/TAI/3/2010	TAI10-03	639	613	0	95.93	4.07	SEA	Mya-98
9	O/VIT/5/2010 (JQ070323)	VIT10-05	639	613	0	95.93	4.07	SEA	Mya-98
10	O/TAI/4/2010	TAI10-04	639	612	0	95.77	4.23	SEA	Mya-98
Most Closely Related Reference Viruses									
(see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/MYA/7/98 (DQ164925)	MYA98-07	639	578	0	90.45	9.55	SEA	Mya-98
2	O/TAI/189/87* (TRRL)	TAI87-AC	639	565	0	88.42	11.58	SEA	unnamed
3	O/IRN/31/2009	IRN09-31	639	549	0	85.92	14.08	ME-SA	PanAsia-2 ^{FAR-09}
4	O/PAK/16/2010	PAK10-16	639	544	0	85.13	14.87	ME-SA	PanAsia-2 ^{PUN-10}
5	O/UKG/35/2001 (AJ539141)	UKG01-35	639	543	0	84.98	15.02	ME-SA	PanAsia
6	O/IRN/8/2005	IRN05-08	639	540	0	84.51	15.49	ME-SA	PanAsia-2
7	O/IND/R2/75* (AF204276)	IND75--A	639	539	0	84.35	15.65	ME-SA	unnamed
8	O/IND/53/79 (AF292107)	IND79A53	639	538	0	84.19	15.81	ME-SA	unnamed
9	O/IRN/18/2010	IRN10-18	639	538	0	84.19	15.81	ME-SA	PanAsia-2 ^{BAL-09}
10	O/TUR/257/2008* (FMDI)	TUR08-AD	639	537	0	84.04	15.96	ME-SA	PanAsia-2 ^{TER-08}

nt, nucleotides

*, not a WRLFMD reference number

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Serotype: O	Report date: 24/02/2016
WRLFMD Ref No: TAI/19/2015	Reported by: N.J. Knowles
Batch No: WRLFMD/2015/00032	Checked by: K. Bachanek-Bankowska
Sender Ref: 73-2/15R3B3	
Location: Puyut, Maung, Pattani, Thailand	Topotype: SEA
Date collected: 26/08/2015	Genotype/strain: Mya-98
Date received by WRLFMD: 26/11/2015	Sequence filename: TAI15-19.SEQ
Date received for sequencing: 19/02/2016	Date sequence last updated: 24/02/2016
Species: Cattle	No. of Nt determined: 639
Material used: BTy1 09/02/2016	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 4220
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 90 days
	Sequencing time: 5 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/TAI/8/2015	TAI15-08	639	631	0	98.75	1.25	SEA	Mya-98
2	O/VIT/21/2014	VIT14-21	639	631	0	98.75	1.25	SEA	Mya-98
3	O/VIT/26/2014	VIT14-26	639	631	0	98.75	1.25	SEA	Mya-98
4	O/VIT/27/2014	VIT14-27	639	631	0	98.75	1.25	SEA	Mya-98
5	O/VIT/13/2014	VIT14-13	639	630	0	98.59	1.41	SEA	Mya-98
6	O/MAY/2/2014	MAY14-02	639	629	0	98.44	1.56	SEA	Mya-98
7	O/TAI/10/2014	TAI14-10	639	629	0	98.44	1.56	SEA	Mya-98
8	O/TAI/7/2015	TAI15-07	639	629	0	98.44	1.56	SEA	Mya-98
9	O/TAI/9/2015	TAI15-09	639	629	0	98.44	1.56	SEA	Mya-98
10	O/VIT/18/2014	VIT14-18	639	629	0	98.44	1.56	SEA	Mya-98
Most Closely Related Reference Viruses									
(see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/MYA/7/98 (DQ164925)	MYA98-07	639	591	0	92.49	7.51	SEA	Mya-98
2	O/TAI/189/87* (TRRL)	TAI87-AC	639	566	0	88.58	11.42	SEA	unnamed
3	O/CAM/3/98 (AJ294910)	CAM98-03	639	553	0	86.54	13.46	SEA	Cam-94
4	O/IND/R2/75* (AF204276)	IND75--A	639	552	0	86.38	13.62	ME-SA	unnamed
5	O1/Manisa/TUR/69 (AY593823)	TUR69--G	639	547	0	85.60	14.40	ME-SA	unnamed
6	O/IRN/31/2009	IRN09-31	639	546	0	85.45	14.55	ME-SA	PanAsia-2 ^{FAR-09}
7	O/TUR/264/2009* (FMDI)	TUR09-AK	639	546	0	85.45	14.55	ME-SA	PanAsia-2 ^{SAN-09}
8	O/UKG/35/2001 (AJ539141)	UKG01-35	639	545	0	85.29	14.71	ME-SA	PanAsia
9	O/IND/53/79 (AF292107)	IND79A53	639	544	0	85.13	14.87	ME-SA	unnamed
10	O/TUR/257/2008* (FMDI)	TUR08-AD	639	544	0	85.13	14.87	ME-SA	PanAsia-2 ^{TER-08}

nt, nucleotides

*, not a WRLFMD reference number

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Serotype: O WRLFMD Ref No: TAI/20/2015 Batch No: WRLFMD/2015/00032 Sender Ref: 75/15R1B3 Location: Tungkamin, Namom, Songkla, Thailand Date collected: 28/08/2015 Date received by WRLFMD: 26/11/2015 Date received for sequencing: 19/02/2016 Species: Cattle Material used: BTy1 09/02/2016 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 24/02/2016 Reported by: N.J. Knowles Checked by: K. Bachanek-Bankowska Topotype: SEA Genotype/strain: Mya-98 Sequence filename: TAI15-20.SEQ Date sequence last updated: 24/02/2016 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 4220 Min. no. of nt for comparison: 600 Total turn-around time: 90 days Sequencing time: 5 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/TAI/18/2015	TAI15-18	639	639	0	100.00	0.00	SEA	Mya-98
2	O/TAI/10/2013	TAI13-10	639	626	0	97.97	2.03	SEA	Mya-98
3	O/MAY/22/2013	MAY13-22	639	624	0	97.65	2.35	SEA	Mya-98
4	O/TAI/11/2013	TAI13-11	639	624	0	97.65	2.35	SEA	Mya-98
5	O/TAI/2/2010	TAI10-02	639	614	0	96.09	3.91	SEA	Mya-98
6	O/TAI/27/2009	TAI09-27	639	614	0	96.09	3.91	SEA	Mya-98
7	O/TAI/5/2010	TAI10-05	639	614	0	96.09	3.91	SEA	Mya-98
8	O/TAI/3/2010	TAI10-03	639	613	0	95.93	4.07	SEA	Mya-98
9	O/VIT/5/2010 (JQ070323)	VIT10-05	639	613	0	95.93	4.07	SEA	Mya-98
10	O/TAI/4/2010	TAI10-04	639	612	0	95.77	4.23	SEA	Mya-98
Most Closely Related Reference Viruses									
(see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/MYA/7/98 (DQ164925)	MYA98-07	639	578	0	90.45	9.55	SEA	Mya-98
2	O/TAI/189/87* (TRRL)	TAI87-AC	639	565	0	88.42	11.58	SEA	unnamed
3	O/IRN/31/2009	IRN09-31	639	549	0	85.92	14.08	ME-SA	PanAsia-2 ^{FAR-09}
4	O/PAK/16/2010	PAK10-16	639	544	0	85.13	14.87	ME-SA	PanAsia-2 ^{PUN-10}
5	O/UKG/35/2001 (AJ539141)	UKG01-35	639	543	0	84.98	15.02	ME-SA	PanAsia
6	O/IRN/8/2005	IRN05-08	639	540	0	84.51	15.49	ME-SA	PanAsia-2
7	O/IND/R2/75* (AF204276)	IND75--A	639	539	0	84.35	15.65	ME-SA	unnamed
8	O/IND/53/79 (AF292107)	IND79A53	639	538	0	84.19	15.81	ME-SA	unnamed
9	O/IRN/18/2010	IRN10-18	639	538	0	84.19	15.81	ME-SA	PanAsia-2 ^{BAL-09}
10	O/TUR/257/2008* (FMDI)	TUR08-AD	639	537	0	84.04	15.96	ME-SA	PanAsia-2 ^{TER-08}

nt, nucleotides

*, not a WRLFMD reference number

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Serotype: O	Report date: 24/02/2016
WRLFMD Ref No: TAI/22/2015	Reported by: N.J. Knowles
Batch No: WRLFMD/2015/00032	Checked by: K. Bachanek-Bankowska
Sender Ref: 85/15R3B1	
Location: Banthi, Banthi, Lumphon, Thailand	Topotype: SEA
Date collected: 08/09/2015	Genotype/strain: Mya-98
Date received by WRLFMD: 26/11/2015	Sequence filename: TAI15-22.SEQ
Date received for sequencing: 19/02/2016	Date sequence last updated: 24/02/2016
Species: Water Buffalo	No. of Nt determined: 639
Material used: BTy1 13/02/2016	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 4220
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 90 days
	Sequencing time: 5 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/MYA/1/2015	MYA15-01	639	638	0	99.84	0.16	SEA	Mya-98
2	O/TAI/25/2015	TAI15-25	630	629	9	99.84	0.16	SEA	Mya-98
3	O/MAY/11/2012	MAY12-11	639	608	0	95.15	4.85	SEA	Mya-98
4	O/MAY/12/2012	MAY12-12	639	608	0	95.15	4.85	SEA	Mya-98
5	O/MAY/13/2012	MAY12-13	639	608	0	95.15	4.85	SEA	Mya-98
6	O/MAY/14/2012	MAY12-14	639	608	0	95.15	4.85	SEA	Mya-98
7	O/MAY/15/2012	MAY12-15	639	608	0	95.15	4.85	SEA	Mya-98
8	O/MAY/16/2012	MAY12-16	639	608	0	95.15	4.85	SEA	Mya-98
9	O/MAY/17/2012	MAY12-17	639	608	0	95.15	4.85	SEA	Mya-98
10	O/MAY/10/2012	MAY12-10	639	607	0	94.99	5.01	SEA	Mya-98
Most Closely Related Reference Viruses									
(see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/MYA/7/98 (DQ164925)	MYA98-07	639	588	0	92.02	7.98	SEA	Mya-98
2	O/TAI/189/87* (TRRL)	TAI87-AC	639	567	0	88.73	11.27	SEA	unnamed
3	O/CAM/3/98 (AJ294910)	CAM98-03	639	538	0	84.19	15.81	SEA	Cam-94
4	O/TUR/257/2008* (FMDI)	TUR08-AD	639	535	0	83.72	16.28	ME-SA	PanAsia-2 ^{TER-08}
5	O/IRN/31/2009	IRN09-31	639	534	0	83.57	16.43	ME-SA	PanAsia-2 ^{FAR-09}
6	O/IRN/88/2009	IRN09-88	639	534	0	83.57	16.43	ME-SA	PanAsia-2 ^{ANT-10}
7	O/PAK/16/2010	PAK10-16	639	533	0	83.41	16.59	ME-SA	PanAsia-2 ^{PUN-10}
8	O/IND/R2/75* (AF204276)	IND75--A	639	532	0	83.26	16.74	ME-SA	unnamed
9	O/IRN/8/2005	IRN05-08	639	532	0	83.26	16.74	ME-SA	PanAsia-2
10	O/TUR/264/2009* (FMDI)	TUR09-AK	639	532	0	83.26	16.74	ME-SA	PanAsia-2 ^{SAN-09}

nt, nucleotides

*, not a WRLFMD reference number

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Serotype: O WRLFMD Ref No: TAI/25/2015 Batch No: WRLFMD/2015/00032 Sender Ref: 97/15R3B3 Location: Maythod, Thern, Lumpang, Thailand Date collected: 14/09/2015 Date received by WRLFMD: 26/11/2015 Date received for sequencing: 19/02/2016 Species: Cattle Material used: BTy1 13/02/2016 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 24/02/2016 Reported by: N.J. Knowles Checked by: K. Bachanek-Bankowska Topotype: SEA Genotype/strain: Mya-98 Sequence filename: TAI15-25.SEQ Date sequence last updated: 24/02/2016 No. of Nt determined: 630 No. of ambiguities: 9 Gene length: 639 Total no. of comparisons: 4204 Min. no. of nt for comparison: 600 Total turn-around time: 90 days Sequencing time: 5 days
Comments: This sequence contains nine ambiguous nt positions suggesting either a single diverse virus population or a mixture of two or more virus populations.	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/TAI/22/2015	TAI15-22	630	629	0	99.84	0.16	SEA	Mya-98
2	O/MYA/1/2015	MYA15-01	630	628	0	99.68	0.32	SEA	Mya-98
3	O/MAY/11/2012	MAY12-11	630	602	0	95.56	4.44	SEA	Mya-98
4	O/MAY/12/2012	MAY12-12	630	602	0	95.56	4.44	SEA	Mya-98
5	O/MAY/13/2012	MAY12-13	630	602	0	95.56	4.44	SEA	Mya-98
6	O/MAY/14/2012	MAY12-14	630	602	0	95.56	4.44	SEA	Mya-98
7	O/MAY/15/2012	MAY12-15	630	602	0	95.56	4.44	SEA	Mya-98
8	O/MAY/16/2012	MAY12-16	630	602	0	95.56	4.44	SEA	Mya-98
9	O/MAY/17/2012	MAY12-17	630	602	0	95.56	4.44	SEA	Mya-98
10	O/MAY/10/2012	MAY12-10	630	601	0	95.40	4.60	SEA	Mya-98
Most Closely Related Reference Viruses									
(see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/MYA/7/98 (DQ164925)	MYA98-07	630	584	0	92.70	7.30	SEA	Mya-98
2	O/TAI/189/87* (TRRL)	TAI87-AC	630	563	0	89.37	10.63	SEA	unnamed
3	O/CAM/3/98 (AJ294910)	CAM98-03	630	534	0	84.76	15.24	SEA	Cam-94
4	O/TUR/257/2008* (FMDI)	TUR08-AD	630	533	0	84.60	15.40	ME-SA	PanAsia-2 ^{TER-08}
5	O/IRN/31/2009	IRN09-31	630	530	0	84.13	15.87	ME-SA	PanAsia-2 ^{FAR-09}
6	O/IRN/88/2009	IRN09-88	630	530	0	84.13	15.87	ME-SA	PanAsia-2 ^{ANT-10}
7	O/PAK/16/2010	PAK10-16	630	530	0	84.13	15.87	ME-SA	PanAsia-2 ^{PUN-10}
8	O/TUR/264/2009* (FMDI)	TUR09-AK	630	530	0	84.13	15.87	ME-SA	PanAsia-2 ^{SAN-09}
9	O/IRN/8/2005	IRN05-08	630	529	0	83.97	16.03	ME-SA	PanAsia-2
10	O/IND/R2/75* (AF204276)	IND75--A	630	528	0	83.81	16.19	ME-SA	unnamed

nt, nucleotides

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Serotype: O WRLFMD Ref No: TAI/26/2015 Batch No: WRLFMD/2015/00032 Sender Ref: 123/15R3 Location: Satingpra, Satingpra, Songkla, Thailand Date collected: 22/09/2015 Date received by WRLFMD: 26/11/2015 Date received for sequencing: 19/02/2016 Species: Cattle Material used: BTy1 13/02/2016 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 24/02/2016 Reported by: N.J. Knowles Checked by: K. Bachanek-Bankowska Topotype: SEA Genotype/strain: Mya-98 Sequence filename: TAI15-26.SEQ Date sequence last updated: 24/02/2016 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 4220 Min. no. of nt for comparison: 600 Total turn-around time: 90 days Sequencing time: 5 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/TAI/29/2015	TAI15-29	639	634	0	99.22	0.78	SEA	Mya-98
2	O/TAI/27/2015	TAI15-27	639	633	0	99.06	0.94	SEA	Mya-98
3	O/MYA/5/2015	MYA15-05	639	629	0	98.44	1.56	SEA	Mya-98
4	O/LAO/101/2009*	LAO09-AF	639	598	0	93.58	6.42	SEA	Mya-98
5	O/VIT/NCVD-19/2010 (NVRQS)	VIT10-AE	639	598	0	93.58	6.42	SEA	Mya-98
6	O/VIT/NCVD-20/2010 (NVRQS)	VIT10-AF	639	598	0	93.58	6.42	SEA	Mya-98
7	O/VIT/NCVD-17/2010 (NVRQS)	VIT10-AC	639	597	0	93.43	6.57	SEA	Mya-98
8	O/VIT/NCVD-18/2010 (NVRQS)	VIT10-AD	639	597	0	93.43	6.57	SEA	Mya-98
9	O/TAI/25/2015	TAI15-25	630	588	9	93.33	6.67	SEA	Mya-98
10	O/MYA/5/2009 (HQ116228)	MYA09-05	639	596	0	93.27	6.73	SEA	Mya-98
Most Closely Related Reference Viruses									
(see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/MYA/7/98 (DQ164925)	MYA98-07	639	580	0	90.77	9.23	SEA	Mya-98
2	O/TAI/189/87* (TRRL)	TAI87-AC	639	557	0	87.17	12.83	SEA	unnamed
3	O/CAM/3/98 (AJ294910)	CAM98-03	639	535	0	83.72	16.28	SEA	Cam-94
4	O/PAK/16/2010	PAK10-16	639	529	0	82.79	17.21	ME-SA	PanAsia-2 ^{PUN-10}
5	O/TUR/257/2008* (FMDI)	TUR08-AD	639	528	0	82.63	17.37	ME-SA	PanAsia-2 ^{TER-08}
6	O/BHU/3/2009 (KM921814)	BHU09-03	639	526	0	82.32	17.68	ME-SA	Ind-2001d
7	O/ETH/3/2004 (FJ798109)	ETH04-03	639	526	0	82.32	17.68	EA-3	unnamed
8	O/TUR/264/2009* (FMDI)	TUR09-AK	639	526	0	82.32	17.68	ME-SA	PanAsia-2 ^{SAN-09}
9	O/TAN/2/2004 (KF561679)	TAN04-02	639	525	0	82.16	17.84	EA-2	unnamed
10	O/ETH/1/2007 (FJ798137)	ETH07-01	639	524	0	82.00	18.00	EA-3	unnamed

nt, nucleotides

*, not a WRLFMD reference number

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Serotype: O WRLFMD Ref No: TAI/27/2015 Batch No: WRLFMD/2015/00032 Sender Ref: 128-1/15R2 Location: Kangkajan, Kangkajan, Petchburi, Thailand Date collected: 28/09/2015 Date received by WRLFMD: 26/11/2015 Date received for sequencing: 19/02/2016 Species: Cattle Material used: BTy1 13/02/2016 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 24/02/2016 Reported by: N.J. Knowles Checked by: K. Bachanek-Bankowska Topotype: SEA Genotype/strain: Mya-98 Sequence filename: TAI15-27.SEQ Date sequence last updated: 24/02/2016 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 4220 Min. no. of nt for comparison: 600 Total turn-around time: 90 days Sequencing time: 5 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/MYA/5/2015	MYA15-05	639	633	0	99.06	0.94	SEA	Mya-98
2	O/TAI/26/2015	TAI15-26	639	633	0	99.06	0.94	SEA	Mya-98
3	O/TAI/29/2015	TAI15-29	639	632	0	98.90	1.10	SEA	Mya-98
4	O/TAI/25/2015	TAI15-25	630	593	9	94.13	5.87	SEA	Mya-98
5	O/LAO/101/2009*	LAO09-AF	639	601	0	94.05	5.95	SEA	Mya-98
6	O/MYA/5/2009 (HQ116228)	MYA09-05	639	599	0	93.74	6.26	SEA	Mya-98
7	O/MYA/6/2009 (HQ116229)	MYA09-06	639	599	0	93.74	6.26	SEA	Mya-98
8	O/VIT/NCVD-19/2010 (NVRQS)	VIT10-AE	639	599	0	93.74	6.26	SEA	Mya-98
9	O/VIT/NCVD-20/2010 (NVRQS)	VIT10-AF	639	599	0	93.74	6.26	SEA	Mya-98
10	O/HKN/10/2010	HKN10-10	639	598	0	93.58	6.42	SEA	Mya-98
Most Closely Related Reference Viruses									
(see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/MYA/7/98 (DQ164925)	MYA98-07	639	583	0	91.24	8.76	SEA	Mya-98
2	O/TAI/189/87* (TRRL)	TAI87-AC	639	560	0	87.64	12.36	SEA	unnamed
3	O/CAM/3/98 (AJ294910)	CAM98-03	639	538	0	84.19	15.81	SEA	Cam-94
4	O/TUR/257/2008* (FMDI)	TUR08-AD	639	531	0	83.10	16.90	ME-SA	PanAsia-2 ^{TER-08}
5	O/PAK/16/2010	PAK10-16	639	530	0	82.94	17.06	ME-SA	PanAsia-2 ^{PUN-10}
6	O/IND/R2/75* (AF204276)	IND75--A	639	529	0	82.79	17.21	ME-SA	unnamed
7	O/IND/53/79 (AF292107)	IND79A53	639	528	0	82.63	17.37	ME-SA	unnamed
8	O/IRN/31/2009	IRN09-31	639	528	0	82.63	17.37	ME-SA	PanAsia-2 ^{FAR-09}
9	O/IRN/8/2005	IRN05-08	639	528	0	82.63	17.37	ME-SA	PanAsia-2
10	O/TUR/264/2009* (FMDI)	TUR09-AK	639	528	0	82.63	17.37	ME-SA	PanAsia-2 ^{SAN-09}

nt, nucleotides

*, not a WRLFMD reference number

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Serotype: O WRLFMD Ref No: TAI/28/2015 Batch No: WRLFMD/2015/00032 Sender Ref: 147/15R3 Location: Naphay, Muang, Chaiyaphum, Thailand Date collected: 08/10/2015 Date received by WRLFMD: 26/11/2015 Date received for sequencing: 19/02/2016 Species: Cattle Material used: BTy1 13/02/2016 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 24/02/2016 Reported by: N.J. Knowles Checked by: K. Bachanek-Bankowska Topotype: SEA Genotype/strain: Mya-98 Sequence filename: TAI15-28.SEQ Date sequence last updated: 24/02/2016 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 4220 Min. no. of nt for comparison: 600 Total turn-around time: 90 days Sequencing time: 5 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/VIT/21/2014	VIT14-21	639	631	0	98.75	1.25	SEA	Mya-98
2	O/VIT/26/2014	VIT14-26	639	631	0	98.75	1.25	SEA	Mya-98
3	O/VIT/27/2014	VIT14-27	639	631	0	98.75	1.25	SEA	Mya-98
4	O/MAY/2/2014	MAY14-02	639	629	0	98.44	1.56	SEA	Mya-98
5	O/TAI/10/2014	TAI14-10	639	629	0	98.44	1.56	SEA	Mya-98
6	O/VIT/18/2014	VIT14-18	639	629	0	98.44	1.56	SEA	Mya-98
7	O/TAI/9/2015	TAI15-09	639	628	0	98.28	1.72	SEA	Mya-98
8	O/VIT/13/2014	VIT14-13	639	628	0	98.28	1.72	SEA	Mya-98
9	O/MAY/9/2014	MAY14-09	639	627	0	98.12	1.88	SEA	Mya-98
10	O/TAI/13/2014	TAI14-13	639	627	0	98.12	1.88	SEA	Mya-98
Most Closely Related Reference Viruses									
(see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/MYA/7/98 (DQ164925)	MYA98-07	639	590	0	92.33	7.67	SEA	Mya-98
2	O/TAI/189/87* (TRRL)	TAI87-AC	639	568	0	88.89	11.11	SEA	unnamed
3	O/IND/R2/75* (AF204276)	IND75--A	639	552	0	86.38	13.62	ME-SA	unnamed
4	O/CAM/3/98 (AJ294910)	CAM98-03	639	549	0	85.92	14.08	SEA	Cam-94
5	O/UAE/4/2008 (KM921876)	UAE08-04	636	545	0	85.69	14.31	ME-SA	Ind-2001c
6	O/KUW/3/97 (DQ164904)	KUW97-03	639	545	0	85.29	14.71	ME-SA	Ind-2001a
7	O1/Manisa/TUR/69 (AY593823)	TUR69--G	639	545	0	85.29	14.71	ME-SA	unnamed
8	O/IRN/31/2009	IRN09-31	639	544	0	85.13	14.87	ME-SA	PanAsia-2 ^{FAR-09}
9	O/TUR/264/2009* (FMDI)	TUR09-AK	639	544	0	85.13	14.87	ME-SA	PanAsia-2 ^{SAN-09}
10	O/IRN/88/2009	IRN09-88	639	543	0	84.98	15.02	ME-SA	PanAsia-2 ^{ANT-10}

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v4.3

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FAO World Reference Laboratory for FMD Genotyping Report

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Serotype: O	Report date: 24/02/2016
WRLFMD Ref No: TAI/29/2015	Reported by: N.J. Knowles
Batch No: WRLFMD/2015/00032	Checked by: K. Bachanek-Bankowska
Sender Ref: 149-2/15R3	
Location: Maypim, Muang, Payao, Thailand	Topotype: SEA
Date collected: 09/10/2015	Genotype/strain: Mya-98
Date received by WRLFMD: 26/11/2015	Sequence filename: TAI15-29.SEQ
Date received for sequencing: 19/02/2016	Date sequence last updated: 24/02/2016
Species: Cattle	No. of Nt determined: 639
Material used: BTy1 13/02/2016	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 4220
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 90 days
	Sequencing time: 5 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/TAI/26/2015	TAI15-26	639	634	0	99.22	0.78	SEA	Mya-98
2	O/TAI/27/2015	TAI15-27	639	632	0	98.90	1.10	SEA	Mya-98
3	O/MYA/5/2015	MYA15-05	639	628	0	98.28	1.72	SEA	Mya-98
4	O/LAO/101/2009*	LAO09-AF	639	599	0	93.74	6.26	SEA	Mya-98
5	O/VIT/NCVD-19/2010 (NVRQS)	VIT10-AE	639	599	0	93.74	6.26	SEA	Mya-98
6	O/VIT/NCVD-20/2010 (NVRQS)	VIT10-AF	639	599	0	93.74	6.26	SEA	Mya-98
7	O/VIT/NCVD-17/2010 (NVRQS)	VIT10-AC	639	598	0	93.58	6.42	SEA	Mya-98
8	O/VIT/NCVD-18/2010 (NVRQS)	VIT10-AD	639	598	0	93.58	6.42	SEA	Mya-98
9	O/TAI/25/2015	TAI15-25	630	589	9	93.49	6.51	SEA	Mya-98
10	O/MYA/5/2009 (HQ116228)	MYA09-05	639	597	0	93.43	6.57	SEA	Mya-98
Most Closely Related Reference Viruses									
(see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/MYA/7/98 (DQ164925)	MYA98-07	639	581	0	90.92	9.08	SEA	Mya-98
2	O/TAI/189/87* (TRRL)	TAI87-AC	639	558	0	87.32	12.68	SEA	unnamed
3	O/CAM/3/98 (AJ294910)	CAM98-03	639	536	0	83.88	16.12	SEA	Cam-94
4	O/PAK/16/2010	PAK10-16	639	530	0	82.94	17.06	ME-SA	PanAsia-2 ^{PUN-10}
5	O/TUR/257/2008* (FMDI)	TUR08-AD	639	526	0	82.32	17.68	ME-SA	PanAsia-2 ^{TER-08}
6	O/BHU/3/2009 (KM921814)	BHU09-03	639	525	0	82.16	17.84	ME-SA	Ind-2001d
7	O/ETH/1/2007 (FJ798137)	ETH07-01	639	525	0	82.16	17.84	EA-3	unnamed
8	O/ETH/3/2004 (FJ798109)	ETH04-03	639	525	0	82.16	17.84	EA-3	unnamed
9	O/IND/R2/75* (AF204276)	IND75--A	639	525	0	82.16	17.84	ME-SA	unnamed
10	O/IRN/8/2005	IRN05-08	639	525	0	82.16	17.84	ME-SA	PanAsia-2

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v4.3

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Report on FMDV O in Thailand in 2015

Batch: WRLFMD/2016/00032

◆ indicates viruses in this batch

Software: MEGA 6.06

Analysis

----- Phylogeny Reconstruction

Scope ----- All Selected Taxa

Statistical Method ----- Neighbor-joining

Phylogeny Test

----- Bootstrap method

No. of Bootstrap Replications ----- 1000

Substitution Model

----- Nucleotide

Model/Method ----- Kimura 2-parameter model

Substitutions to Include ----- d: Transitions + Transversions

Rates and Patterns

----- Uniform rates

Pattern among Lineages ----- Same (Homogeneous)

Data Subset to Use

----- Pairwise deletion

Codons Included ----- 1st+2nd+3rd+Non-Coding

No. of Sites : 642

No Of Bootstrap Reps = 1000

Only bootstrap values of 70% and above are shown

*, not a WRLFMD Ref. No.

N.J. Knowles, J. Wadsworth & K. Bachanek-Bankowska,
24 February 2016

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